



**GRADUATE RESEARCH:
INTRODUCTION TO THESIS**

**OFFICE OF THE ASSOCIATE PROVOST
REICHLIN HOUSE
215-951-2705**

Approved by Graduate Council: September 12, 2008
Approved by Graduate Education Committee: September 23, 2008
Updated: July 2010

TABLE OF CONTENTS

Introduction	3
Defining Thesis	3
Unique Qualities of Thesis.....	3
Overview of the Thesis Process.....	4
Choosing a Thesis Topic.....	4
Breaking Down the Thesis Process into Manageable Parts.....	5
Managing Time.....	7
Understanding the Student-Thesis Advisor Relationship.....	8
Elements of a Thesis.....	9
Documentation of Sources.....	10
Graduate Student Academic Support.....	11
Advice to Students Undertaking Thesis.....	12
Summary of Student's Thesis Responsibilities.....	13
Summary of Thesis Advisor's Responsibilities.....	13
Summary of Program Director's Responsibilities.....	14
Summary of School Dean's Responsibilities.....	14

INTRODUCTION

Master's programs at Philadelphia University differ in their requirements regarding thesis. Although many require a thesis, programs vary in the number of semesters and credits they allocate to it. Programs that do not require a thesis require endpoint documents of other sorts, sometimes designated as final projects or professional portfolios. The Graduate Catalog details each graduate program's specific requirements, and the programs themselves have generated additional materials that elaborate on their expectations regarding thesis or the equivalent.

In this Introduction to Thesis, the term "thesis" will be used to describe any and all culminating projects for the Master's degree at Philadelphia University. The term "thesis advisor" will be used to designate the faculty member with whom the student works most closely, referred to in some programs as the "committee chair."

DEFINING THESIS

A Master's thesis presents original work or original ideas about existing work with clarity and comprehension. It poses an argument and demonstrates how its argument relates to current knowledge in the field of study. A Master's thesis additionally must meet the standards of the University. A thesis can embody all of these qualities whether it is a research-based or experiment-based, a creative document, or a combination of some or all of these possibilities. The specific form and parameters of a thesis are flexible, being contingent on the field of study. Regardless of thesis variations among graduate programs, a Master's thesis is commonly recognized as the culmination of a student's work toward earning an advanced degree.

UNIQUE QUALITIES OF THESIS

A thesis differs substantially from other projects and papers required of students throughout their graduate coursework in terms of breadth of treatment of a topic, depth of understanding, and appearance, or structure.

Breadth: A thesis is expected to demonstrate awareness of how professionals in the field have been thinking, writing, and acting with regard to the thesis topic. Providing a broad survey of the field is a way the writer positions the thesis in the context of an on-going academic dialogue. In establishing a context for the thesis, the writer illustrates how the thesis challenges or adds, even if incrementally, to the state of knowledge in the field. In short, the scope of a thesis is much broader than the scope of other graduate school papers.

Depth: To show competence in the field, a thesis is expected to demonstrate depth of understanding as well as breadth of treatment. This obligates the writer to choose a topic of substance and treat it with academic rigor, examining it with the necessary thoroughness and critical scrutiny, in accordance with the graduate program's parameters and criteria.

Appearance and Structure: Due to the unusual breadth and depth with which it treats a topic, the thesis requires a structure that is much more elaborate and complex than that of the normal graduate school paper. The argument of a thesis is always developed over a series of separate chapters. Furthermore, the writer must include key supporting tables and figures in addition to other relevant documents on which research is based (e.g., questionnaires or surveys), plus a table of contents to aid the reader in accessing particular aspects of the document. Breadth of scope + depth of treatment + complexity of structure add considerable length, and thus, almost without exception, a thesis is much longer than papers written at earlier points in the graduate program.

OVERVIEW OF THE THESIS PROCESS

A thesis in any form is an ambitious document. It needs to be undertaken with energy, commitment, and care, and also with common sense and logic. In approaching thesis, a student needs to strategize like a general planning a military campaign.

Key to success with thesis is:

- being well informed about the project criteria and expectations of both the graduate program and the University
- choosing a topic that is appropriate for the level of work and the expectations of the student's program
- breaking down a complex project into its constituent parts
- managing time, through determination of both short-term and long-range goals
- establishing and maintaining a productive student-thesis advisor relationship

Undertaking and successfully completing thesis is wholly the student's responsibility. Nonetheless, the student can expect support in this endeavor from particular University faculty and administrators. The thesis advisor or committee chair, the committee members, the graduate program director, and the School Dean are involved to various degrees in thesis, each playing a separate and distinct role. Clarifying the role and responsibilities of each of these various participants in the thesis process is one of the aims of this Introduction to Thesis.

CHOOSING A THESIS TOPIC

Thesis is organically embedded in the program of graduate study and intentionally positioned at the end in order to serve as the culmination of work toward an advanced degree. Although the timing of thesis signifies that the student is nearing the end of

graduate coursework, it is never too soon for the student to begin thinking about and preparing for thesis.

Selecting a thesis topic is one of the most critical decisions a student makes. Best practices for selecting a thesis topic emphasize the importance of timing and of advisor input. Students are counseled to give themselves a long head start by identifying one or more topics of interest from the moment they begin graduate study. Advance preparation can take the forms of:

- acquiring a broad knowledge of the professional field through exposure to journals, trade publications, exhibits, or other outlets for expression of professional activity in the field
- exploring a topic of interest, using it as the subject of a paper or project in early coursework, where possible
- discussing the topic with individual graduate program faculty to discover which faculty members share this professional interest or have particular expertise in this area

Graduate programs differ in the degree of latitude they give students in choosing a topic. Regardless of the degree of personal choice allowed by a program, the student who arrives at the beginning of the thesis semester(s) with some initial grounding in the topic is prepared to make more productive use of time. The prepared student also is likely to have acquired a realistic perspective on how to strategize about undertaking the task and therefore is more apt to complete the thesis in a timely manner.

The thesis advisor is an important resource in choosing a topic and in guiding a student to narrow or recast a topic the advisor deems overly broad, or lacking sufficient depth, or otherwise unsuitable for a Master's program. Other faculty in the graduate program, too, if consulted, can provide additional insights and suggestions to the student who is unsure about how to choose a topic.

BREAKING DOWN THE THESIS PROCESS INTO MANAGEABLE PARTS

As with any large and complex task, thesis is best approached in parts, not tackled head on. Determining how to divide thesis into separate parts or tasks is not always immediately apparent or easy to do. Broadly speaking, there are three general stages of activity involved in undertaking a thesis. The student can turn to the thesis advisor for assistance with each of these.

1. Preparing to Start

- learning about graduate program objectives and criteria (consult the Graduate Catalog, relevant graduate program documents, and the Guide for the Preparation of Doctoral Dissertations and Master's Theses)

- reviewing all University regulations regarding submission, approval, and deadlines (consult the Guide for the Preparation of Doctoral Dissertations and Master's Theses)
- selecting a thesis topic
- choosing a thesis advisor and agreeing on a schedule for future meetings

This stage typically culminates in the thesis advisor's approval of the student's thesis proposal.

2. Researching and Writing

Research of some sort is involved in the production of any thesis, whether the student's approach to thesis is theoretical, depends on laboratory experiment, library research, visual research, or fieldwork. Many students assume they should complete all or most of their research before beginning to "put it all together" and write. However, best practice indicates that the quality of a thesis will be improved if the student regards research and writing as mutually reinforcing each other, or existing in a recursive relationship. Simply put, this means that the student allows each separate activity to stimulate, inform, and propel the other. Research yields material (or results) to write about; the act of writing suggests new possibilities for research; additional research can yield new facts or other ideas to write about, or enhance the nature of what was already written, or provide a fuller interpretation of results, etc. Rather than treat research and writing as sequential tasks, the student following best practices consciously endeavors to cycle back and forth between the two.

The student should find back and forth movement between research and writing possible whether thesis research occurs in the lab, the library, or the design studio. However, treating research and writing in this recursive manner requires an intentional decision. Frequent contact with an advisor at regular intervals can support the student's efforts. The thesis advisor can help the student assess where the research is leading and identify areas that remain to be investigated. The advisor can also provide feedback on the student's writing on a progressive basis, giving the student the maximum possibility for improving the quality of the work.

Students also need to allow for the possibility that when performing research or writing they might experience unexpected challenges or obstacles that add to the time they had allowed for these activities. The thesis advisor can be a considerable resource in sharing knowledge, providing suggestions and solutions to problems, and critiquing preliminary efforts to help students surmount the situations that are impeding their progress.

3. Revising

Experienced writers accept the fact that a first draft does not represent their best work. They know they will need to produce a number of drafts and plan on having to do so. With each new draft they look for ways to enhance critical thinking, develop important

points, sharpen logical reasoning, and improve coherence (or flow). The graduate student should expect to redraft or revise many, if not all chapters of the thesis, some perhaps multiple times. Feedback on drafts from an advisor and others can help by providing objective assessment and by offering specific suggestions on ways to improve the work in progress.

After producing a number of drafts the student must attend to editing and proofreading. This is the stage at which the student checks a complete, almost-final draft to make sure documentation of all outside sources is faultless and that any and all grammar, punctuation, or word choice errors have been corrected. The thesis advisor then reads the final draft to ensure its correctness before approving it for submission to the School Dean. If the thesis advisor deems the thesis deficient in any way, the student is obligated to undertake the necessary revisions until the thesis advisor judges the thesis satisfactory and ready to submit to the School Dean for final approval. The School Dean, in turn, may request additional changes or revisions before signing off on the thesis.

MANAGING TIME

There is widespread agreement that management of time is extremely important to successful completion of a thesis. Given the magnitude of a thesis project, however, time management itself is complex and requires a conscientious effort at intentional, well-informed planning. Time management is most effective when it proceeds on two fronts: dealing with the long-range goal of thesis completion and also with the short-term goals of focusing on and completing individual aspects of the research and sections of the writing that go into the finished document.

Long-range planning helps the student move through the process of producing a thesis by acknowledging the general stages of thesis and allotting appropriate blocks of time for each:

- Stage 1—preparation for thesis, ending with an approved proposal
- Stage 2—completion of all research and completion of a “good” draft (not the first draft, but a subsequent draft, revised in response to feedback from the thesis advisor and others)
- Stage 3—completion of the final draft and the advisor’s acceptance of this draft for submission to the School Dean for satisfaction of requirements for the degree

Each of these stages is equally important and none can be skipped. However, they are not equal in the demands they make on the student or the advisor. The student needs to take primary responsibility for preparing for and initiating thesis (Stage 1), although consulting with faculty and finding a thesis advisor—or establishing a relationship with an assigned advisor—is part of the process. During Stage 1, the student is typically engaged in other graduate courses, and thesis is not the central focus.

Thesis becomes the central focus of a student's time and energy once the student begins research and writing (Stage 2). The thesis advisor's role grows commensurately, as student and advisor communicate about the student's progress and the advisor reads drafts of the thesis. When research is completed and all or most of the thesis is written (Stage 3), the student will be tying up loose ends and polishing the text. For the student who has practiced good time management, this is the point at which any pressures generated by thesis should begin to relax since the task will be nearing completion. The thesis advisor's role is still critical. The thesis advisor will read the full final draft of the thesis to decide whether or not it is acceptable and can be sent to the School Dean for completion of the degree. If the advisor finds the thesis deficient, the student will have more work to do before the advisor reconsiders whether the thesis is done.

Short-term planning, as the term suggests, entails constructing a sensible work schedule for accomplishing the many smaller tasks within each of the three larger stages. Having short-term goals helps the student continue to move forward with the project. Accomplishing short-term goals provides a feeling of satisfaction that comes with completing a finite task and realizing that one is moving closer to achieving an end goal.

A general document, such as this one, cannot enumerate the small tasks that are specific to undertaking an individual thesis. However, the experience of a thesis advisor is invaluable in providing expert advice about how to break down the research and writing processes into manageable units and set attainable goals for each. The thesis advisor can guide the student to construct a sensible work schedule, one based on informed decisions, which establishes realistic blocks of time for the student to accomplish the specific tasks involved in attaining short-term goals. Regular contact with the thesis advisor also will encourage the student to adhere to the agreed-upon work schedule or, with the advisor's input, help the student adjust the work schedule, if both agree it needs to be changed.

A schedule of short-term goals sometimes turns out to be provisional, a sort of "best guess" at how long each activity might take. Although it may have been the product of sensible decision-making, a timetable of short-term goals might need to be readjusted—occasionally or more often—if the student's research hits a snag or the student suffers a personal setback, such as severe illness, for example. If short-term goals are not being met for any reason at all, the student and thesis advisor should construct a new timetable, rather than simply abandon the original set of deadlines and soldier on without a plan.

UNDERSTANDING THE STUDENT-THESIS ADVISOR RELATIONSHIP

Graduate programs at Philadelphia University ensure that each graduate student is paired with a thesis advisor (in some programs called the committee chair). Some programs allow students to pick their advisors, whereas others assign an advisor to the student. In some programs, the program director and thesis advisor are the same

person, but in others that is not the case. Regardless of how students and advisors are matched, the student-thesis advisor relationship is intended to help the student, the program, and the University. The student benefits from the mentoring of a professional in the field who can provide guidance about research, feedback on writing, and support for navigating the process of bringing a thesis to completion. From an institutional perspective, the student-thesis advisor relationship is also a means of upholding the quality of graduate work, the integrity of graduate programs, and the criteria of the University.

As both mentor and subject matter expert, the thesis advisor helps the student negotiate the thesis process, from approving the student's topic (accepting the thesis proposal) to determining that the thesis is complete, meets graduate program and University criteria, and is ready to be sent to the School Dean for certification of completion of the degree. Advisors—and graduate programs—differ in how they define specifics of the student-thesis advisor relationship. Therefore, at the outset of being paired, it is incumbent on both parties, the student and the thesis advisor, to discuss the parameters of this relationship and to agree on such matters as frequency and timing of the contact they will have, the kind of feedback and support the student can expect from the thesis advisor, and the expectations the thesis advisor will have of the student.

Many graduate programs call for each student to have a thesis committee as well as a thesis advisor. In most cases, this committee is chaired by the thesis advisor and meets to hear the student's report of the thesis after it is completed and has been approved by the thesis advisor for submission. The committee will typically contain other faculty from the graduate program and, occasionally, faculty from other related fields of study, plus outside professionals. The program director and School Dean customarily are invited to these presentations, whether serving on the committee or not. In graduate programs in which the committee is chosen in advance, committee members can serve as an additional resource for the student while still engaged in research and writing.

The thesis advisor and thesis committee thus play key contributing roles in guiding the student through thesis. Regardless, the main responsibility for all phases of thesis lies with the student. The student is the individual responsible for maintaining contact with the thesis advisor, responding to advice and suggestions, and making progress on the thesis, from topic selection to completion.

ELEMENTS OF A THESIS

Some elements of a thesis are standard, but students are counseled to decide the number and function of chapters with the thesis advisor in advance of beginning to write. Student and thesis advisor should review this plan periodically and alter it as necessary as the student's work progresses.

The standard elements of the body of a thesis include:

- Introduction or Background—includes hypothesis, purpose or goal of the work, and briefly answers the question “so what?” regarding the significance of the topic and the argument the thesis advances. An account of the background of the topic, if substantial, might appear in a separate chapter.
- Literature Review—provides a scholarly context for the argument proposed by and supported in the thesis. The literature review should be broad enough to enable readers to perceive how this argument fits into past and present scholarly discussion of the topic.
- Separate chapters (as many as needed)—each focuses on a different aspect of the research conducted and the findings that research has yielded. These chapters may be devoted to areas such as Methods, Findings, Analysis, depending on the student’s professional field.
- Conclusion—restates the main argument and reaffirms its significance in the professional field in which it is offered. Action-oriented theses might also include recommendations (if appropriate to the topic).
- Complete list of all sources used in the thesis, titled and formatted in accordance with the documentation style used throughout the thesis.

A thesis will include a number of other sections, too, often categorized as front matter and back matter. Required sections include a title page, approval form, statement of copyright, table of contents, abstract, and list documenting all sources used in the thesis. Optional sections include a list of figures or tables, appendix, dedication, and acknowledgements. The order in which various sections appear is fixed by custom and cannot be changed. (For more information about these regulations, consult the Guide to the Preparation of Doctoral Dissertations and Master’s Theses.)

Best practice advises the student to compose drafts of individual sections or chapters as research developments permit, without regard to the order of appearance of these sections in the final thesis document. Although the abstract must be written last, other sections often can be drafted in any order. This method of composition ensures that the student will be using the time allotted to the thesis semester(s) efficiently, making steady progress toward completion.

DOCUMENTATION OF SOURCES

In conformity with the conventions of academic research and with Philadelphia University’s Academic Integrity Policy, all use of sources in the thesis must be properly acknowledged. This means that the body of the thesis must contain specific in-text citations each time ideas, information, statistics, and graphics are taken from sources. All borrowed language must be quoted exactly and cited appropriately. All paraphrases of information, ideas, and statistics similarly require citation. Graphics, which are likened to visual quotations, require citations, as well. Whether the student credits sources by means of numbered footnotes or endnotes, or parenthetical

citations, or some other method will depend on the documentation style being employed.

In addition to full, accurate in-text citation, the thesis must contain at its end one comprehensive, correctly formatted list of all sources used in the body of the text. Whether this list is called Works Cited, References, Bibliography, or given another name will depend on the documentation style being employed. The formatting of individual entries on the list will also be determined by the documentation style being used.

Many professional fields are specific in their preference for a particular documentation style, whether APA, Chicago, MLA, CSE, ICMJE, or another. If the student's field has no stated preference, MLA can be used as the default documentation style. Before the student begins to write, the student and thesis advisor should discuss documentation and determine the style the student will employ.

Errors in documentation suggest sloppy, unprofessional research practices at best and serious academic integrity infractions at worst. It behooves the student to avoid creating any such circumstances. To offset problems with proper use of sources, it is imperative that the student have a thorough, up-to-date knowledge of documentation practice before undertaking thesis so as to employ competent documentation skills in all aspects of research and writing: gathering information, taking notes, writing rough drafts, and editing final copy. The student cannot rely on RefWorks or other formatting tools to be sufficient or wholly accurate. Official guides or handbooks for each major documentation style are available at Gutman Library. Instruction in using these guides is available from writing tutors at the Learning & Advising Center and on the Center's website.

The thesis advisor will check drafts of the thesis for proper documentation and will be particularly rigorous in examining documentation as part of a final reading of the thesis. Inappropriate use of sources, including the lack of in-text citations and incorrect format, constitutes grounds for delaying the thesis approval process.

GRADUATE STUDENT ACADEMIC SUPPORT

The thesis advisor is the graduate student's primary resource for developing the thesis topic, undertaking research, and presenting it in a cogent and field-appropriate manner. While engaged in thesis, the graduate student can often profit from other forms of academic support available at the University as well.

Paul J. Gutman Library has reference librarians who specialize in particular fields. They should be consulted by students who are unfamiliar with the reference tools of the field and by those who are experiencing any difficulty locating the types of sources they need for their research. Librarians can also provide help with using on-line documentation tools such as RefWorks.

The Learning & Advising Center is staffed by professional writing tutors who can provide assistance with writing at all stages of composition, from organizing ideas to rewriting or

revising new drafts. Writing tutors can also help students understand how to document sources in the styles most commonly used in academia, and the Center's website contains guides to each of these documentation styles, as well.

The faculty endorses the benefits of writing tutoring and expects students to work on thesis with a writing tutor on at least three separate occasions strategically distributed throughout the drafting and revising process. Three meetings with Learning & Advising staff are required for students enrolled in thesis. To derive the maximum benefit from writing tutoring, students, especially ESL students and those who consider themselves weak or inexperienced writers, should plan to work with a writing tutor early on as well as incrementally on chapters or small sections of the thesis over the period of composition, rather than request tutoring on the entire thesis after it is fully drafted.

Faculty in the student's graduate program, other than the thesis advisor, and faculty in related areas of study can augment the thesis advisor's expertise and provide leads on sources, research tips, and more.

ADVICE TO STUDENTS UNDERTAKING THESIS

- Learn about your program's requirements regarding thesis.
- Inform yourself of the University's formatting standards and deadlines, as specified in the Guide for the Preparation of Doctoral Dissertations and Master's Theses.
- Save everything related to your research and writing (notes, printouts, files, drafts). Back up files frequently and keep multiple copies of electronic files.
- Keep all documents related to your progress through the graduate program and all correspondence with your thesis advisor and program director.
- Be meticulous about documenting sources as you CONSULT them and again when you USE them. Check that your knowledge of how to document sources is thorough and up to date.
- Strive to make continuous progress on the thesis. If stalled with one part of it, turn to another aspect you can work on instead. Remember that working efficiently does not always necessitate writing sequentially.
- Be proactive. Take the initiative to seek advice and help in a timely manner from your thesis advisor and other faculty. Avail yourself of University resources (Gutman Library's specialized reference librarians, the Learning & Advising Center's professional writing tutors, University faculty and staff) as appropriate.

SUMMARY OF STUDENT'S THESIS RESPONSIBILITIES*

The graduate student is expected to display a high degree of motivation and initiative in all stages of developing and producing a thesis. Specifically, it is the student's responsibility to:

- be well informed about graduate program and University policies regarding thesis and to adhere to them
- develop a research plan and timetable, in consultation with the thesis advisor
- keep the thesis advisor informed of progress and meet with the advisor at pre-determined intervals
- accept and benefit from the thesis advisor's feedback on work in progress, and make all final revisions, as directed
- access reference help at Gutman Library as needed
- schedule three or more writing tutoring sessions at the Learning & Advising Center while drafting and revising, rather than after the thesis is complete
- keep records of research and drafts of the thesis

SUMMARY OF THESIS ADVISOR'S RESPONSIBILITIES*

Among the most basic responsibilities of the thesis advisor (or committee chair) are the following:

- assist the student in determining a thesis topic that meets the objectives of the graduate program and can be completed within the expected time frame
- help the student understand the phases of thesis completion and break down the process of researching the topic and writing the thesis into a manageable set of tasks
- aid the student in establishing a timetable for completion of various aspects of research and writing
- provide the student with feedback on progress at stated intervals and help students stick to (or revise) the agreed upon research and writing timetable
- make sure the student receives writing tutoring support from the Learning & Advising Center and research support from Gutman Library reference specialists, as needed

- introduce the student to other University faculty or off-campus professionals who can provide specialized thesis support
- read the entire thesis, judge its completion, and approve its readiness for submission to the School Dean
- encourage the student's early participation in the professional field through presentation at conferences, attendance at colloquia, and submission of work for publication
- counsel the student on career options, including resume preparation, and provide letters of reference and general career advice

SUMMARY OF PROGRAM DIRECTOR'S RESPONSIBILITIES

Program directors at Philadelphia University are faculty with teaching as well as administrative responsibilities for curriculum and instruction in the graduate program. The program director ensures that clear, written directives for thesis are available to students upon embarking on graduate work in the program, or as soon afterward as it is deemed useful to provide this information.

In some graduate programs, the program director serves as thesis advisor for some or all students. When not already acting as thesis advisor, the program director is invited to attend thesis presentations and, where professional expertise is relevant to students' topics, to serve on thesis committees.

SUMMARY OF SCHOOL DEAN'S RESPONSIBILITIES

As the chief administrative officer of the student's graduate programs, the School Dean sets criteria for theses. Each thesis goes to the Dean for a review of its format after the thesis advisor decides it is ready for submission. The School Dean's approval is required before the thesis can be copied and bound. The Dean's approval signifies official acceptance of the thesis for completion of the graduate degree.

In accordance with the Dean's position and oversight role in graduate education, the Dean is invited to attend graduate thesis presentations and on occasion to participate on thesis committees.

* Grateful acknowledgment is due to Graduate Supervision: Guidelines for Students, Faculty, and Administrators at the University of Pennsylvania for the lists of graduate student and thesis advisor responsibilities.